

**Notice of Allowability**

Application No.

10/604,262

Examiner

Raquel Y. Gordon

Applicant(s)

CHEN ET AL.

Art Unit

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

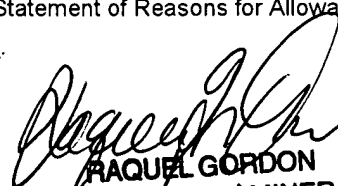
1. ☒ This communication is responsive to application filed 7/7/2003.
2. ☒ The allowed claim(s) is/are 1-18.
3. ☒ The drawings filed on 07 July 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 7/7/2003
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
RAQUEL GORDON  
PRIMARY EXAMINER

***Reasons For Allowance***

The following is an examiner's statement of reasons for allowance. The instant invention is directed to first and second heating resistor elements for heating ink supplied to a bubble jet printhead. Further, when the second heating element for heating the ink is measured to be less than or equal to a predetermined level, the second heating element is caused to short circuit. Further, the ink volume detecting circuit connected to the second heating element operates based on a condition of the second heating element.

While Cornell (US006575563B1) teach a similar invention, Cornell teaches providing a power density per unit volume of each heat resistor in order to provide a sufficient velocity to ejected ink droplets and for optimal printing. Cornell falls short of measuring the remaining volume of ink based on a condition of a second heating resistor, as claimed. Further, Cornell does not disclose short circuiting a second heating element when, based on a detected condition, the volume of ink measured is less than or equal to a predetermined level.

An exhaustive updated search has proven to find no other relevant prior art to teach the claimed combination, as recited. Hence, the claims are deemed to be allowable over the art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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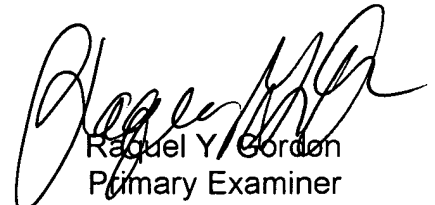
accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Contact Information***

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Raquel Y. Gordon, whose telephone number is (571) 272-2145. The Examiner can normally be reached on M Tu Th and F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. A fax number is available upon request.

Any inquiry of a general nature or relating to the status of this application or proceeding may be directed to the Examiner or Supervisor.

  
Raquel Y. Gordon  
Primary Examiner  
Art Unit 2853  
June 10, 2004

**RAQUEL GORDON  
PRIMARY EXAMINER**